
The Use of Programed Instruction in Introductory Psychology for Teachers

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Programs," *Teachers College Record* (Vol. 1, No. 1, October 1961); James G. Holland and Douglas Porter, "The Influence of Repetition of Incorrectly Answered Items in a Teaching-Machine Program," *Journal of the Experimental Analysis of Behavior* (Vol. 4, No. 4, October 1961); W. C. Holz and John Robinson, "A Note on Machines in a Technology of Education," *Journal of Programed Instruction* (Vol. II, No. 3, 1963); Matthew Israel, "Variably Blurred Prompting in the Analysis of Paired-Associate Learning," (Unpublished); Philip G. Schrag and James G. Holland, "The Incorporation of a PSSC Film into a Program," *AV Communication Review* (Vol. 13, No. 4, Winter 1965); B. F. Skinner, "Why We Need Teaching Machines," *Harvard Educational Review* (Vol. 31, No. 4, 1961); James G. Holland, "New Directions in Teaching-Machine Research," *Programed Learning and Computer-Based Instruction*, edited by J. E. Coulson (New York: Wiley, 1961); Wells Hively, "A Multiple-Choice Visual Discrimination Apparatus," *Journal of the Experimental Analysis of Behavior* (Vol. 7, pp. 387-89, 1964); Wells Hively, "Programming Stimuli in Matching to Sample," *Journal of the Experimental Analysis of Behavior* (Vol. 5, No. 3, July 1962); Wells Hively, "Parametric Experiments with a Matching-to-Sample Program," (Unpublished); Sidney W. Bijou, "Systematic Instruction in the Attainment of Right-Left Form Concepts in Young and Retarded Children," (Unpublished); Edward Maltzman, "An Investigation of Key-Tone Matching with Children and Adults," (Unpublished); Vernon W. Stone, "Teaching a Skill of Data Interpretation by Programed Instruction," *Journal of Programed Instruction* (In Press); Wells Hively and Helen M. Popp, "Attempts To Program Materials To Teach Certain Elements of a Phonic Repertoire," *Journal of the Experimental Analysis of Behavior* (Vol. 7, No. 5, September 1964); Helen M. Popp, "Visual Discrimination of Alphabet Letters," *The Reading Teacher* (January 1964); B. F. Skinner, "Reflections on a Decade of Teaching Machines," *Teachers College Record* (Vol. 65, No. 2, November 1963).

Hunt, William A., and Mathis, Claude *The Use of Programed Instruction in Introductory Psychology for Teachers*. Evanston, Ill.: Northwestern University, n.d. 21 pp. (NDEA Title VII Project No. 1075.)

Purpose To study the relationship between relevant and irrelevant content dimensions and teaching machine and programed textbook method of presentation.

Procedure A total of 114 undergraduate Northwestern University students enrolled in a two-quarter course in educational psychology were randomly assigned to five groups which received instruction under the following conditions: (1) Control group, receiving regular lectures, the textbook by E. R. Hilgard (*Introduction to Psychology*), and assigned readings; (2) Irrelevant Content-Programed Textbook group, having supplementary instruction with a programed textbook—B. F. Skinner's *The Analysis of Behavior* (considered "irrelevant" to the Hilgard text-

book); (3) Irrelevant Content-Teaching Machine group, receiving supplementary instruction on the Skinner program on the Rheem Califone Didak 501 teaching machine; (4) Relevant Content-Programed Workbook group, using a programed workbook prepared for use with Hilgard's text as a supplement to the regular instruction; and (5) Relevant Content-Teaching Machine group, receiving the supplementary instruction on workbook by means of the Didak teaching machine. All subjects were administered a 230-item multiple-choice pretest from a test item pool available to accompany the Hilgard text. This same test was administered at the end of the second quarter as a final measure of achievement. Other examinations were administered during the two quarters. Teaching machine groups scheduled appointments for machines and were expected to complete an assigned number of units; programed text groups were issued appropriate texts and encouraged to use them. Analysis was by analysis of covariance with pretest scores as the covariate.

*Results and
Conclusions*

(1) Although there was evidence of a trend in mean scores favoring the experimental groups, no statistically significant differences were obtained using posttest achievement scores and examination points as criteria. (2) Because a majority of students in the Irrelevant Content-Programed Textbook group indicated they used the programed textbook infrequently, this group was combined with the Control group, and the pooled scores from both groups were compared with the pooled scores from the other three experimental groups. The analysis showed the experimental groups to be significantly superior to the other groups. (3) The experimenters pointed out that "the outstanding difference between our effective experimental conditions and the control conditions was that the experimental conditions assured an added time involvement by the students in the learning process."

Janes, Robert W.,
and McIntyre,
Charles J.
Purpose

Televised Instruction in University Residence Halls with Trained Undergraduates as Discussion Leaders. Urbana: University of Illinois, June 1964. 157 pp. (NDEA Title VII Project No. 457.)

Purpose

To examine in interaction three innovations in higher education: televised instruction, increased emphasis upon undergraduate student participation in the learning-teaching process, and increased attention to the educational environment of residence halls.

Procedure

Each semester for three years, the lecture-demonstration part of a lower-division general social science course was televised on open-circuit, two lessons a week, each transmitted twice. A total of 971 students were encouraged to attend the telecasts either in classrooms or in residence halls, whichever they preferred. Student discussions were led by undergraduates selected by their peers in each discussion group, these leaders having participated in a weekly training program to prepare them for this task. The principal criterion measures were comparison of effects of classroom or residence attendance, student achievement, student attitudes toward televised instruction, and effects of student-led discussion on both the students and the discussion